

CPUC RATE DESIGN WORKSHOP

R.12-06-013

June 25, 2013

**Presentation of
The Utility Reform Network**

TURN's rate design goals

- Preserve affordability for low-to-moderate usage and income customers.
- Preserve equity by harmonizing average rates throughout the utility service territory.
- Promote energy efficiency and conservation.
- Provide customers with optional economic incentives to shift peak loads to off-peak periods.
- Simplified rates that are easy to understand.
- Reliance on direct control measures and energy efficiency for reducing summertime AC usage.

TURN non-CARE rate design proposal

3-Tier non-CARE rate

Tier 1 = 0-100% of baseline

Tier 2 = 101-200% of baseline -- 1.3x Tier 1

Tier 3 = 201+% of baseline -- 1.6x Tier 1

Current high/low tier IOU ratios range from 2.03 (SDG&E) to 2.65 (PG&E)

Tier 1 rate ~15.7 cents

Tier 2 rate ~21 cents

Tier 3 rate ~25.4 cents

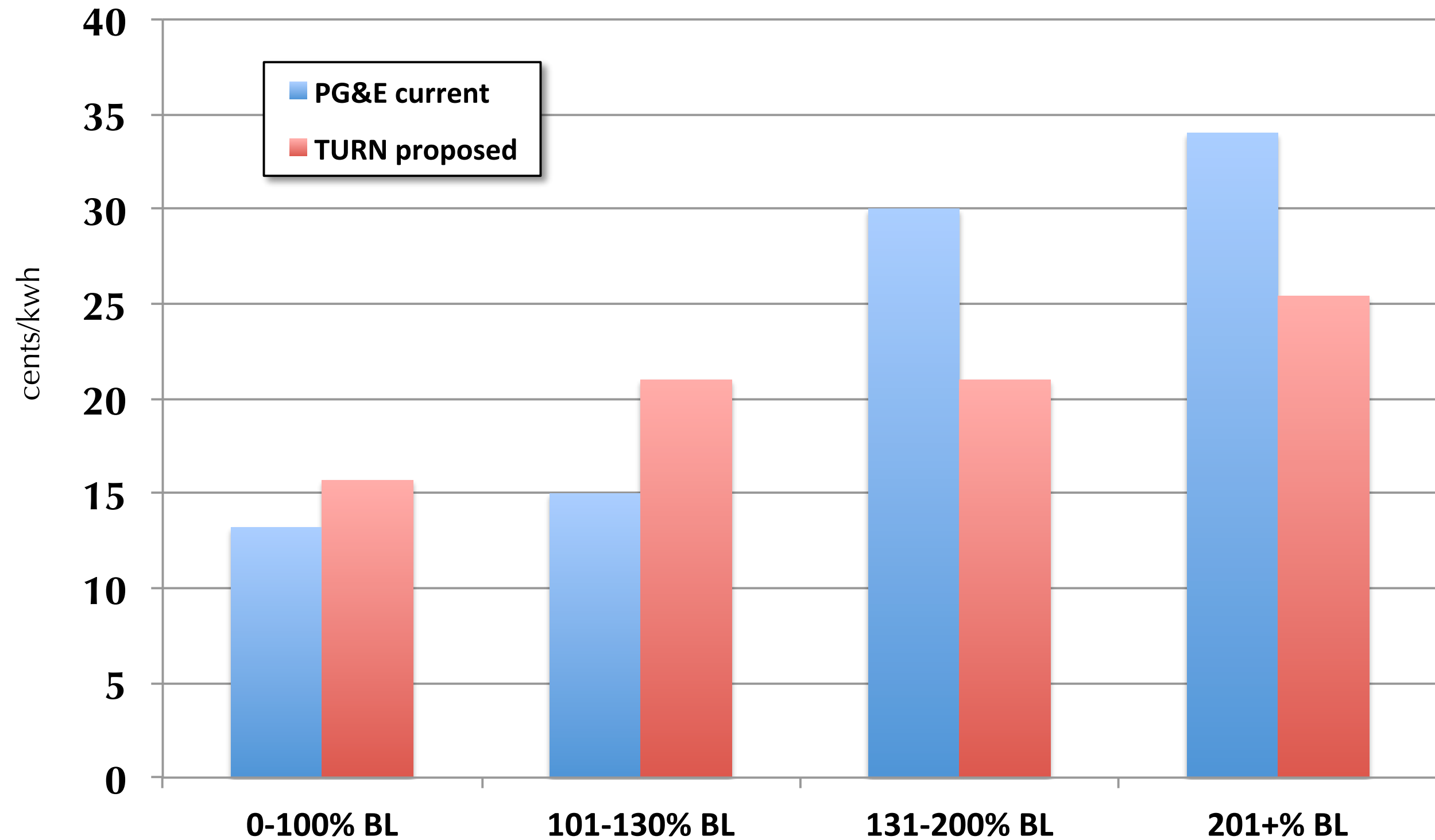
Adjust summer inland baselines (particularly in Central Valley)
to reflect 5-month summer season.

No minimum bill proposal but we support potentially higher minimum bills as a way to address bypass concerns.

Opt-in TOU - simplified non-tiered cost-based TOU with revenue deficiencies being collected in default tiered rates.

PG&E non-CARE rates

Current vs. TURN proposed



TURN CARE rate design proposal

3-tier CARE rate

Same tier quantities as non-CARE

Discounts of 50% on Tier 1, 30% on Tier 2, 10% on Tier 3

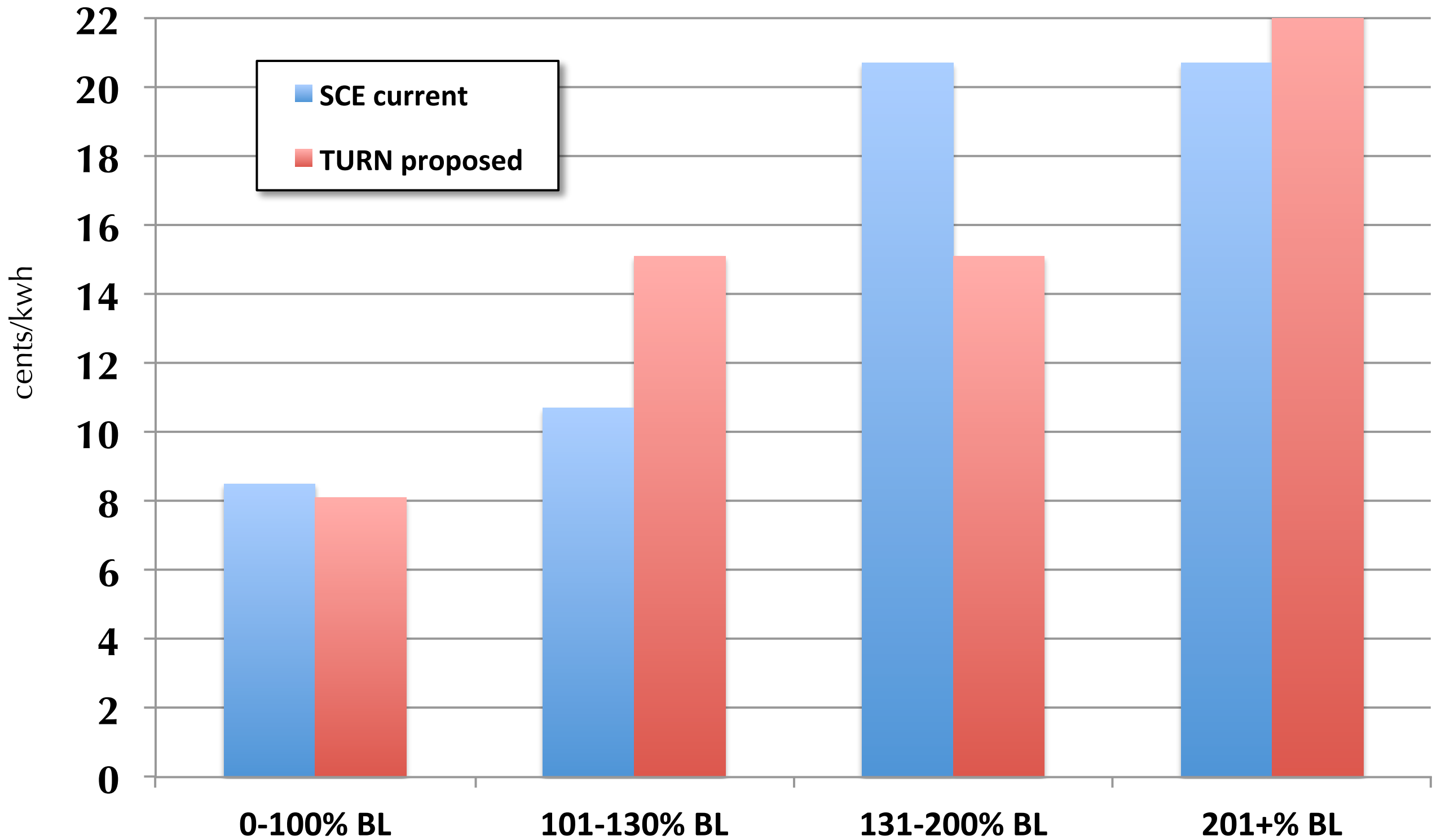
Provides largest discounts for lower tier usage,
smallest discounts for higher tier usage,
increasing conservation signals as usage grows

Open to CARE discount being reflected as discount on entire bill
(rather than separate rate structure).

Consistent CARE discount structure across the IOUs

SCE CARE rates

Current vs. TURN proposed



Defending Tiered Rates

- Studies that show conservation/efficiency benefits from inclining block rates:
 - > Dr. Faruqui paper in Public Utilities Fortnightly (2008)
 - > 2004 Nova Scotia study
 - > Wisconsin 1994 study
 - > Introduction of tiered rates in Colorado
- Demonstrated correlations between usage and income levels within each climate zone.
- Higher usage customers have more discretionary usage that can be reduced in response to higher prices. For PG&E, 24% of residential customers use 48% of all residential class kwh.
- Even if you believe that customers respond to average (rather than marginal) prices, tiered rates promote conservation by raising the average rate. Larger users (by climate zone) face higher average rates.
- We need to do better at explaining that customers save based on the highest price they are charged.

Figure 2: Electric Use Versus Income²⁷

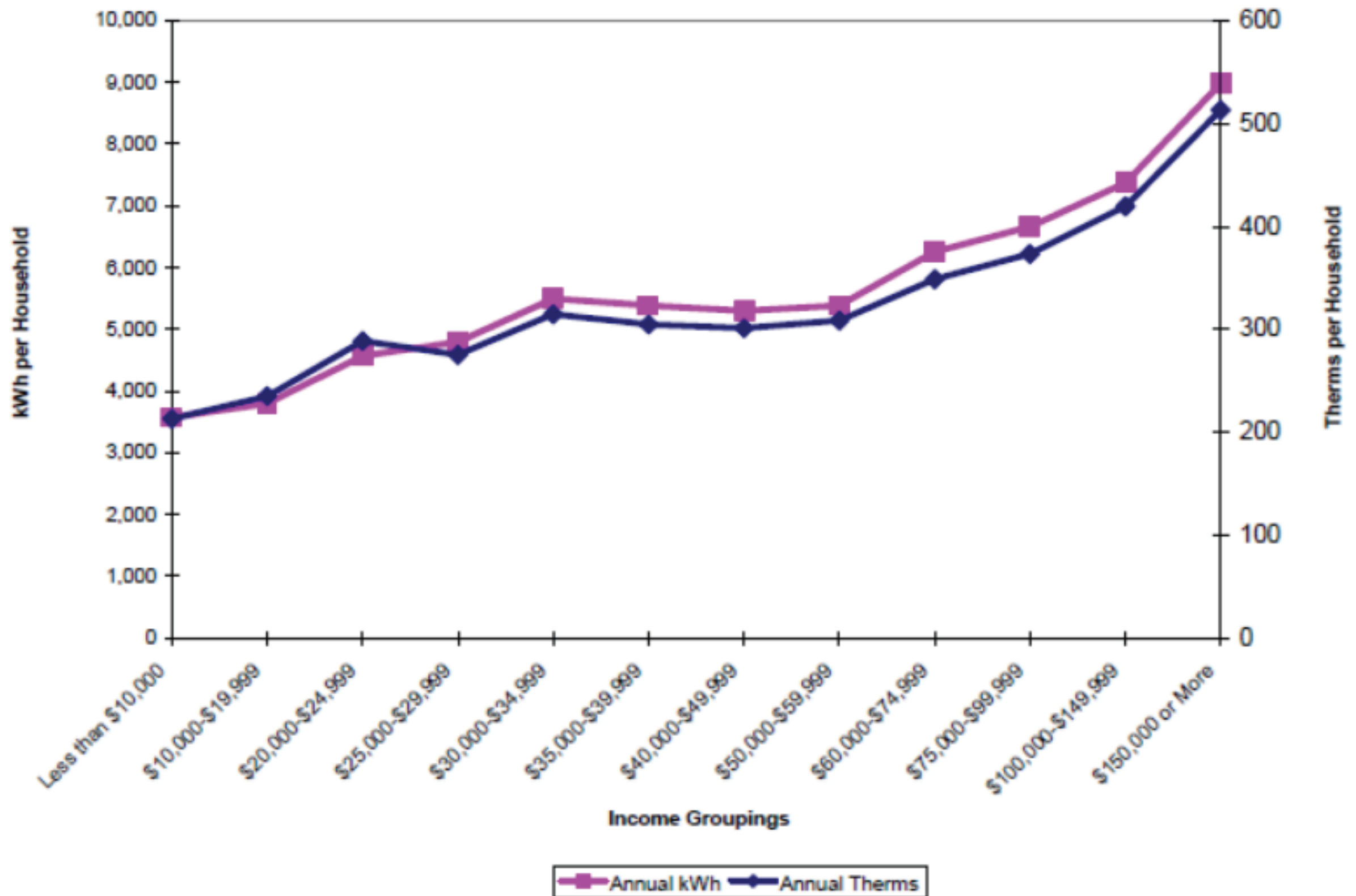
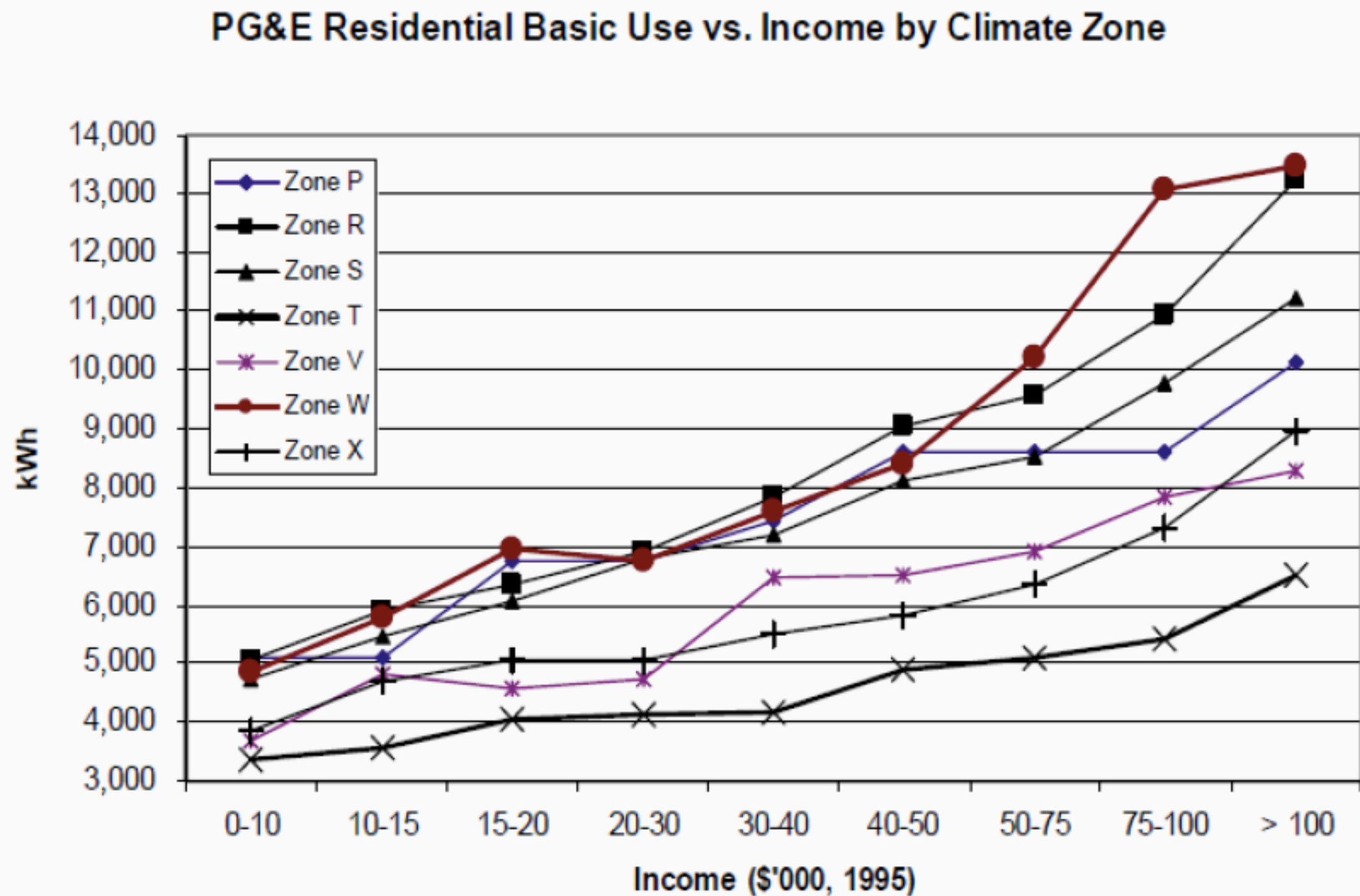


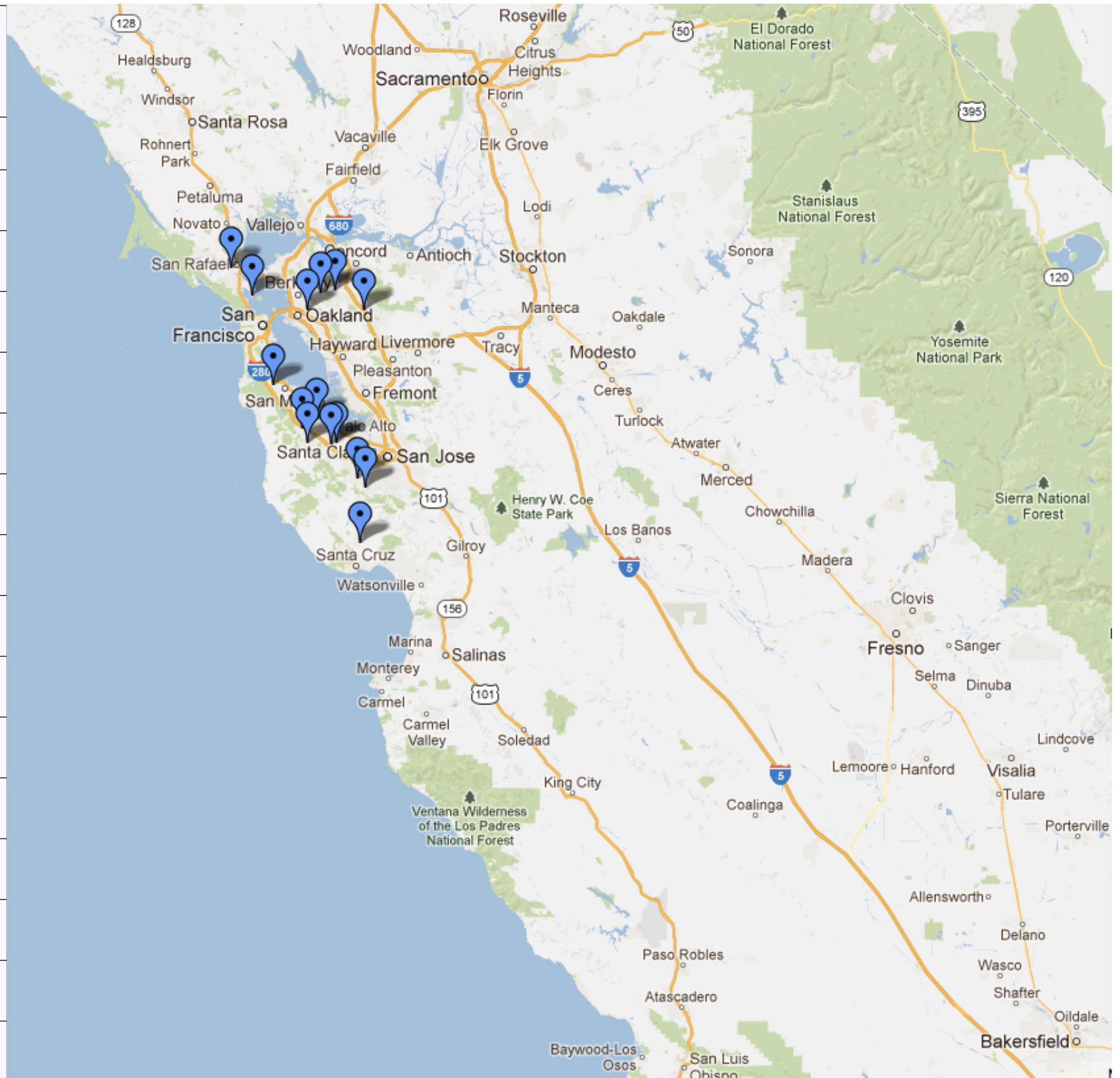
Figure 4: PG&E Residential Basic Use vs. Income by Climate Zone³⁰



use at least doubles from the low est to the highest income in all zones. Use is more sensitive to income in Central Valley zones R, S, and W and less sensitive in Bay Area Zone T.

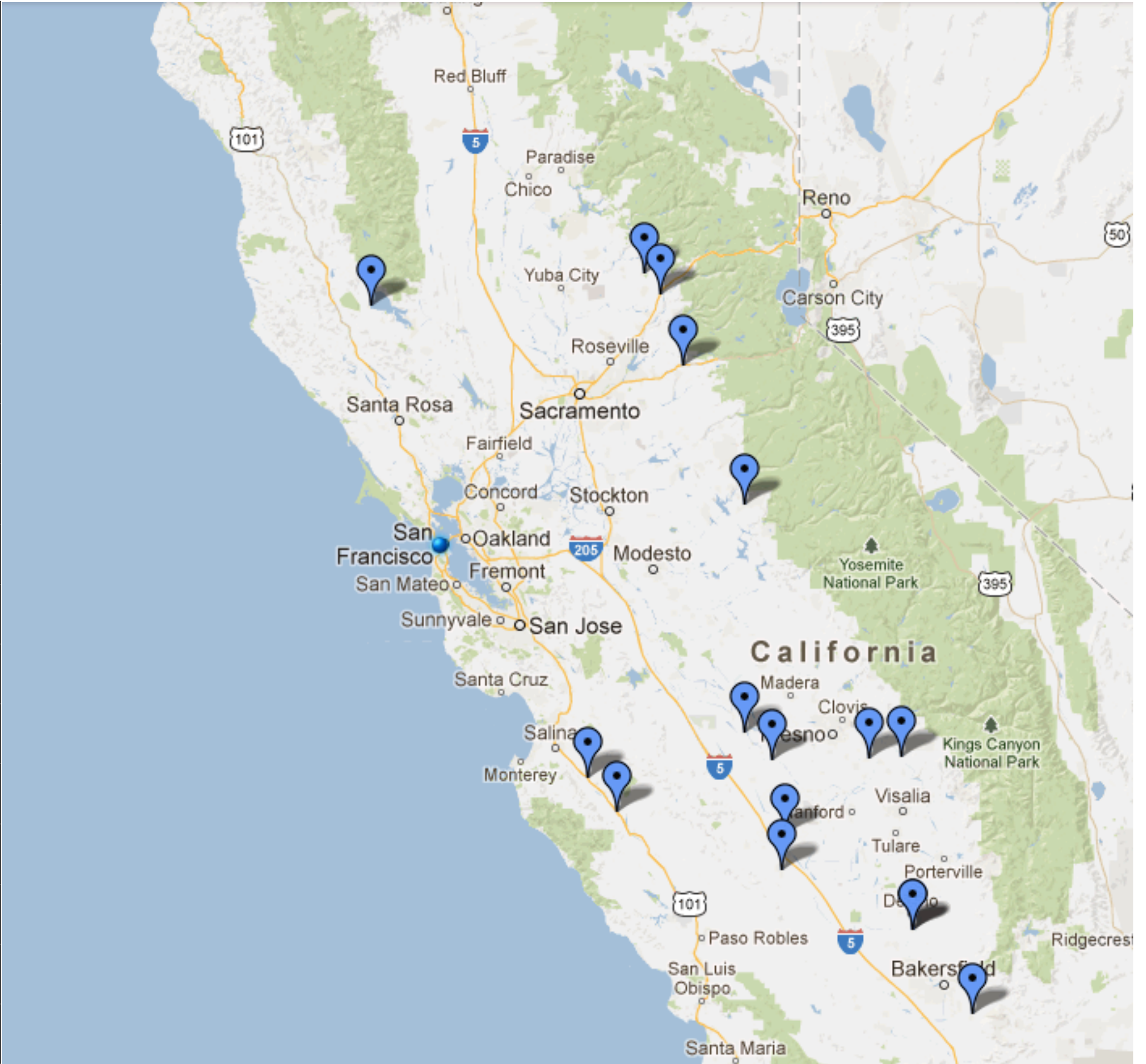
Highest PG&E non-CARE residential rates

	Average non-CARE rate	Annual Household Income
<i>City</i>	<i>(cents/kwh)</i>	<i>Median</i>
Atherton	28.0	\$223,611
Woodside	27.0	\$186,359
Ross	25.6	\$147,345
Hillsborough	25.3	\$209,231
Los Altos Hills	25.2	\$219,485
Monte Sereno	25.1	\$165,484
Portola Valley	24.4	\$164,479
Piedmont	22.8	\$169,674
Belvedere	22.3	\$119,511
Saratoga	21.9	\$145,023
Orinda	21.6	\$160,942
Lafayette	21.3	\$134,000
Danville	21.3	\$129,515
Scotts Valley	20.9	\$101,673
Los Altos	20.5	\$149,964



Lowest PG&E non-CARE residential rates

	Average non-CARE rate	Annual Household Income
City	(cents/kwh)	Median
Arvin	14.6	\$32,949
Avenal	14.7	\$32,736
Lakeport	14.9	\$42,774
San Joaquin	15.0	\$53,764
Mendota	15.0	\$25,109
Parlier	15.1	\$33,110
Orange Cove	15.1	\$27,642
Huron	15.1	\$22,969
Sonora	15.2	\$34,944
Greenfield	15.2	\$52,321
Grass Valley	15.2	\$35,385
Placerville	15.2	\$52,216
Gonzales	15.3	\$48,957
Colfax	15.4	\$41,210
McFarland	15.5	\$35,615



SCE RESIDENTIAL (NON-CARE) CUSTOMER RATES BY CITY

Top 15 highest and lowest rates (cities ≥1000 non-CARE customers)

City	NON-CARE	Annual household income (median)	Average annual usage (non-CARE)
	Average Price (Cents/kWh)		
MALIBU	24.5	\$125,202	12,345
CALABASAS	23.1	\$116,403	12,694
VILLA PARK	23.1	\$146,776	14,377
NEWPORT COAST	23.1	\$164,659	11,418
BEVERLY HILLS	22.7	\$83,463	10,864
TOPANGA	22.1	\$120,234	11,697
SAN MARINO	21.9	\$154,962	11,149
INDIAN WELLS	21.8	\$128,127	19,148
PALO VERDES ESTATES	21.4	\$163,542	9,902
LA CANADA	20.9	\$136,818	11,302
STEVENSON RANCH	20.8	\$110,284	9,662
YORBA LINDA	20.5	\$115,279	9,278
ROLLING HILLS ESTATES	20.5	\$142,763	8,795
LA HABRA HEIGHTS	20.5	\$121,380	11,297
TRABUCO CANYON	20.5	\$152,484	9,374
MONTEREY PARK	15.8	\$52,159	4,810
ROSEMEAD	15.7	\$46,706	5,086
HAWAIIAN GARDENS	15.5	\$52,034	3,944
IDYLLWILD	15.5	\$45,904	4,013
MONTEBELLO	15.4	\$50,881	5,001
SOUTH GATE	15.4	\$43,268	3,732
MARINA DEL REY	15.3	\$86,326	3,639
SHAVER LAKE	15.2	\$72,595	3,698
CUDAHY	15.2	\$41,805	3,015
LAGUNA WOODS	15.1	\$34,192	5,892
COMMERCE	15.1	\$50,667	4,108
MAYWOOD	15.1	\$38,740	2,919
ALHAMBRA	14.9	\$51,527	4,213
WEST HOLLYWOOD	14.9	\$52,009	3,731
BELL GARDENS	14.9	\$39,167	3,177

System Average

18.0

Average PG&E non-CARE usage by climate zone in 2009

Heat storm effect shown in July and August

